

### ABSTRACT

The two-payload decoy device has a square outer case, containing a manifold/delay body assembly, a round payload assembly, and a square payload assembly. The square outer case is closed with an end cap. The manifold/delay body assembly is attached to the round payload assembly, which rests against the square payload assembly. Firing a standard impulse cartridge ignites a booster pellet and delay element in the manifold/delay body assembly. Gases flow through openings in the manifold/delay body assembly and down the corner cavities between the round payload assembly and the square case, pushing the square piston against the square payload, which separates the end cap from the case and ejects the square payload. The delay element burns for a specific time, and then ignites a round payload expulsion charge, which creates gases that push the round piston against the round payload, which dislodges a retaining ring, and ejects the round payload.